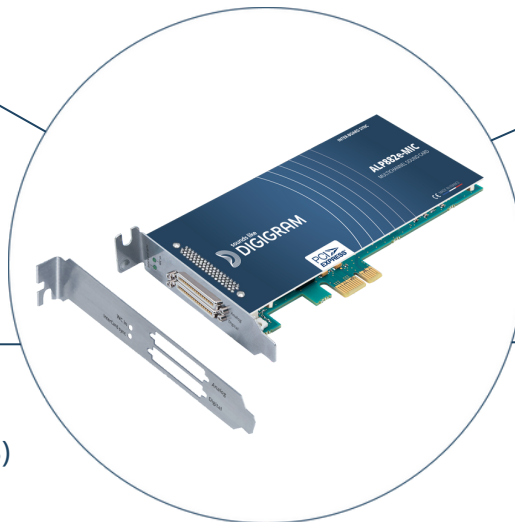


# MULTI-CHANNEL LOW PROFILE PCIe SOUND CARD WITH MIC/LINE INPUTS

ALP442e-MIC is the versatile PCIe sound card for professional PC-based audio systems running under Windows and Linux environments that require up to 8 microphone inputs. This card is ready for any challenge and guarantees unrivaled quality when audio and voice recording applications are critical – audio production, equipment monitoring and recording markets.

Low profile form factor ALP442e-MIC is equipped with switchable 48V phantom power and high-end preamplifiers. It also features 4 balanced analog mic/line inputs, 2 stereo AES3 inputs, 4 balanced analog outputs, 2 AES3 outputs, and 8 GPIOs. The on-board zero latency mixer features 16 I/O channels (4 analog, 4 AES3, 8 software play/record). Each of the 16 output channels has its own mix from the 16 inputs.

Low profile card with 2 brackets



8 stereo software devices for playout and recording  
16x16 on-board mixer

4 analog I/O channels  
Mic/Line inputs  
4 digital I/O channels (AES3)  
8 GPIOs and 8 GPOs

Inter-board synchronization\*  
up to 8 ALP-X cards

## KEY FEATURES



For Windows and Linux



Iconic Rock-solid & life-long



Pristine Digigram sound quality



Multi-applications



Hiccup free reliability

*\*soon available*

## 1 FORMAT

### Dimensions

L: 168 mm x H: 69 mm x I: 20 mm  
L: 6.6 inch; H: 2.7 inch; I: 0.8 inch

### Form Factor

Low profile  
(standard and low profile brackets included)

### Expansion Bus

PCI Express™ x1  
(x2, x4, x8, x16 compatible)

## 2 DRIVERS

### Supported OS

Windows (from Windows 10 and Server 2016)  
Linux (from Linux Kernel 4.9)

### Drivers

Windows: Asio, Wasapi/DirectSound  
Linux: Alsa, Libgpiod

### One Driver Package

Multi-application and multi-card API available

## 3 CONTROL PANEL

### Digigram ALP-X ASIO Settings (On Windows)

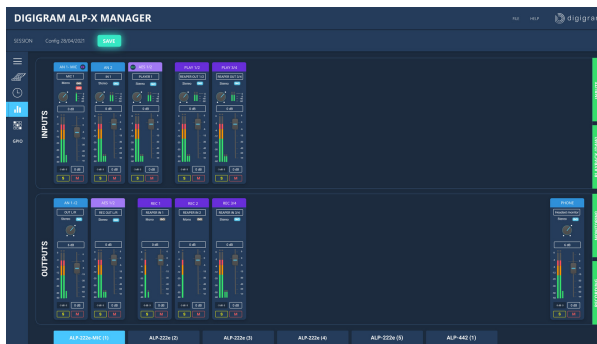
- Asio Control Panel: up to 8 ALP-X cards (intercard synchronization)
- Select I/Os used through Asio (others can be used through Wasapi)

### Digigram ALP-X Manager (On Windows)

- One unified control panel for the whole ALP-X range
- Manages up to 8 ALP-X cards

### Main functions

- Zero latency FPGA-based 16x16 mixer
- Adjustment of input and output levels
- Mixing before monitoring and recording (16 mix buses)
- Clock & sync selection
- GPIO status



## 5 ANALOG AUDIO PERFORMANCES

### Frequency response

@48 kHz, 20 Hz-20 kHz  
Inputs : +/- 0.83 dB  
Outputs : +/- 0.57 dB

### SNR

Inputs  
A-Weighted: >115 dBA  
Unweighted: >112 dB

### Outputs

A-Weighted: >109 dBA  
Unweighted: >106 dB

### THD + Noise (@22 dBu / 1 kHz)

Inputs: <-98 dB @24 dBu  
Outputs: <-96 dB @24 dBu

### Crosstalk

Inputs: @1 kHz / @15 kHz  
128 dB / -107 dB  
Outputs: @1 kHz / @15 kHz  
-127 dB / -112 dB

### Channel phase (@1 kHz)

Inputs: < 0.01°  
Outputs: < -0.02°

## 7 CABLE & CONNECTORS SPECIFICATIONS

### Breakout cable for analog I/Os

- Length 1m, XLR connectors

### Breakout cables for digital I/Os

- Length: 1 m  
- XLR for I/Os and AES11 sync input  
- BNCs for Word clock I/O  
- 2 x D-Sub 25 for GPIOs and GPOs

### Inter board synchronization

## 4 HARDWARE SPECIFICATIONS

### INPUTS

#### Analog

- 4 balanced Mic / line level inputs
- A/D Converters: 24 bits / 192 kHz
- Line level
- Maximum input level/impedance: +24 dBu / >10 kΩ
- Adjustable analog gain: from -24 dB to +16 dB, in 0.5 dB steps
- Adjustable digital gain: from -90 dB to +12 dB in 0.1 dB steps
- Mic level
- Maximum input level/impedance: +10 dBu / >10 kΩ
- Adjustable analog gain: from 0dB to +56 dB, in 0.5 dB steps
- Maximum sensitivity: 0 dBfs for a -56 dBu input signal
- Switchable 48 V phantom power on each input
- Equivalent Input Noise: <-124 dB @ Gain +56 dB (48kHz)

#### Digital

- 2 stereo AES3 inputs
- Adjustable digital gain: from -90 dB to +12 dB, in 0.1 dB steps
- Sample rate (kHz): 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
- Hardware Sample Rate Converter frequency ratio: 1:8 to 7.5:1

#### Others

- 1 AES11 synchronization input
- 1 Word Clock synchronization input
- 8 dry contact GPIOs

### OUTPUTS

#### Analog

- 4 servo-balanced line outputs
- D/A Converters: 24 bits / 192 kHz
- Max level / Impedance: +24 dBu / <100 Ohms
- Adjustable digital gain: from -90 dB to +12 dB, in 0.1 dB steps

#### Digital

- 2 stereo AES3 outputs
- Adjustable output gain: from -90 dB to +12 dB, in 0.1 dB steps
- Sample rate (kHz): 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192

#### Others

- 8 relay GPOs (0.5 A, 48 VCC)
- 1 Word Clock output

## 6 SAMPLE FORMAT

PCM (8, 16, 24, 32 and 32 float bits), Float IEEE754

## 8 SYNCHRONIZATION SOURCES

- Internal clock (kHz)  
11.025, 16, 22.05, 24, 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
- AES11 (kHz)  
32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
- Word Clock input (kHz)  
32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192
- Intercard clock\* (possibility to connect up to 8 ALP-X cards linked with an inter-board sync cable)